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**California Regional Water Quality Control Board  
Lahontan Region**

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Arnold Schwarzenegger  
Governor

August 23, 2007

To All Interested Parties

**TENTATIVE AMENDED WASTE DISCHARGE REQUIREMENTS FOR HEAVENLY  
SKI RESORT, EL DORADO AND ALPINE COUNTIES**

Enclosed are Tentative Amended Waste Discharge Requirements (WDRs) for Heavenly Ski Resort. The amendment proposes to extend the compliance date for fully implementing the California Base Area Retrofit Plan from October 15, 2007 to October 15, 2008.

Water Board staff request that you review the enclosed document and provide comments by **September 22, 2007**. Comments received after September 22, 2007 may not be considered in preparing the proposed Amendment for adoption by the Board at the meeting set for October 10 and 11, 2007 in Truckee, California.

If you need further information regarding this matter, please contact Robert Erlich at (530) 542-5433, or me at (530) 542-5430.

Alan Miller, P.E.  
Chief, North Basin Regulatory Unit

Enclosure: Tentative Amended WDRs for Heavenly Ski Resort

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[File: Heavenly Ski Resort WDID 6A0900033000]

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**BOARD ORDER NO. R6T-2003-0032A2 (TENTATIVE)**  
**WDID NO.6A090033000**

**AMENDED WASTE DISCHARGE REQUIREMENTS**

**FOR**

**HEAVENLY SKI RESORT**

\_\_\_\_\_ El Dorado & Alpine Counties \_\_\_\_\_

The California Regional Water Quality Control Board, Lahontan Region (Water Board or Regional Board) finds:

**1. Facility and Dischargers**

The California portion of Heavenly Ski Resort is the Facility from which the discharge occurs. The Facility is located south of Lake Tahoe. More than 90% of the California portion of the ski area, including the California Base area, is in El Dorado County within the South Tahoe Hydrologic Area of the Lake Tahoe Hydrologic Unit. The remaining portion of the Facility is in Alpine County within the Woodfords Hydrologic Area of the West Fork Carson River Hydrologic Unit.

The Heavenly Valley Limited Partnership (Heavenly), a subsidiary of Vail Resorts, Inc., operates the Heavenly Ski Resort and support facilities on lands owned or administered by the United States Department of Agriculture Forest Service Lake Tahoe Basin Management Unit (LTBMU) and Heavenly. For the purpose of this Order, Heavenly and the LTBMU are the "Dischargers."

Heavenly owns the California Base lodge, access road and parking lots (California Base Area) located just outside of the City of South Lake Tahoe in unincorporated El Dorado County. Runoff from the California Base Area discharges into a tributary to Lake Tahoe, Bijou Park Creek, within the City of South Lake Tahoe.

**2. History of Previous Regulation by the Water Board**

The Water Board has regulated the Facility with Waste Discharge Requirements (WDRs) since 1970. On July 9, 2003 the Water Board adopted Updated WDRs (Board Order No. R6T-2003-0032). To protect beneficial uses of waters in Bijou Park Creek and Lake Tahoe, the Updated WDRs

established compliance schedules for the Dischargers to complete a California Base Area assessment, interim operations and maintenance plan, and a facilities retrofit plan (Provisions II. D. 1 through 4). The Updated WDRs required the Dischargers to complete California Base Area Facilities Retrofit Plan construction by October 15, 2006. For discharges from the California Base Area, the Updated WDRs established the compliance date of November 30, 2008 to meet effluent limits for discharges to surface waters (Discharge Specifications I. A. 1.).

On May 11, 2006, the Water Board adopted Amended WDRs (Board Order No. R6T-2003-0032A1) extending the due date for completing construction of the California Base Area Retrofit Plan to October 15, 2007. The effluent limit compliance date for the California Base Area was not changed from November 30, 2008.

3. Reason for Action

In a letter dated July 23, 2007, Heavenly requested that the Water Board amend the WDRs to extend compliance dates for completing construction of the two treatment systems in their California Base Retrofit Plan. Heavenly requested extending the completion date by one year to October 15, 2008 for the Parking Lot Treatment System (for the fourteen acre parking lot and a snow storage area located south of the parking lot), and by two years to October 15, 2009 for the Wildwood Treatment System (to treat runoff from the Heavenly access road above the intersection of Wildwood Avenue and Saddle Road and from snow pushed from the parking lot onto slopes above Saddle Road and the access road). Heavenly also requested extending the due date by one year to November 30, 2009 for complying with numerical effluent limitations for discharges to surface waters.

4. Compliance Status and Proposed Treatment Systems

Heavenly completed the design of the California Base Retrofit Plan water quality treatment system in early 2006. Heavenly's design for the Parking Lot Treatment System routes runoff through existing vaults, which are capable of trapping coarse sediment, to a large new vault system where runoff from design storms would flow through filter media cartridges containing zeolite, perlite and granular activated carbon. The cartridges are designed to trap fine particulates, nutrients and other pollutants. Portions of the parking lot runoff now discharged to Saddle Road would be routed into the Parking Lot Treatment System. The Wildwood Treatment System was designed to use a smaller vault with cartridges to treat a smaller area. Heavenly's design employs a treatment technology with replaceable filter components that would be upgraded over time as filter cartridge technology improves.

On March 23, 2006, Heavenly submitted additional detailed construction plans for building the system during the 2006 and 2007 construction seasons. When the Water Board approved amended WDRs in May 11, 2006, Heavenly was required to complete full construction by October 15, 2007.

Basic infrastructure components (piping and manholes) were installed in 2006. Heavenly reported the construction of the 2006 improvements cost \$475,683. In 2006 and early 2007 Heavenly conducted additional research on newly-available storm water treatment technology. Heavenly consulted with Water Board staff during the final design, and decided to use a treatment system with large vaults containing filter media cartridges to maximize the capability to trap fine sediment and nutrients. Heavenly completed final design for the balance of the improvements in spring of 2007.

Additional facilities for the Parking Lot Treatment System under construction in 2007 include:

- Two 6-foot diameter manhole vaults with a total of 14 filter media cartridges to treat parking lot runoff during low flow conditions. Each vault would treat flows of 50 gallons per minute (gpm). (Heavenly and Water Board staff estimate the 20-year 1-hour design storm average flow rates are approximately 6000 gpm);
- Four 11-foot by 34-foot vaults without filter media cartridges;
- Plumbed connections between existing pre-treatment vaults and the new advanced treatment vaults; and
- Three automatic water quality monitoring stations to monitor parking lot runoff.

Estimated 2007 costs: \$1,441,358.

Heavenly's request for an extension identified elements of the retrofit plan scheduled for construction after October 15, 2007, including:

- Pre-treatment vaults and treatment vaults (Wildwood Treatment System) with 42 filter media cartridges to treat 630 gpm of runoff from both the Heavenly access road above the intersection of Wildwood Avenue and Saddle Road and from snow pushed from the Facility parking lot onto slopes above Saddle Road and the access road;
- Installation of 388 filter media cartridges to complete the Parking Lot Treatment System designed to treat 6000 gpm flows; and
- Two automatic water quality monitoring stations to monitor runoff from the access road and Saddle Road.

Estimated construction costs after 2007: \$756,841.

Heavenly will not complete construction of the Parking Lot Treatment System or Wildwood Treatment System of the California Base Area Retrofit Plan by the October 15, 2007 compliance date specified in the updated WDRs.

5. Heavenly's Requests to Extend Compliance Dates

Heavenly's request for an extension notes that the estimated costs to complete the treatment systems exceeded their approved capital budget by the time they completed final design and received construction bids. Heavenly asserts that a time extension is needed to spread treatment system capital investment costs over two years. Heavenly has not demonstrated that delays in completing construction of the treatment systems are outside of the control of Heavenly.

a. Completion of Parking Lot Treatment System

Heavenly proposes waiting until the stormwater treatment system manufacturer releases the new, taller versions of the filter media cartridges (with more filter media) in late 2007 or early 2008, and extending the due date for installing the cartridges until October 15, 2008. Heavenly proposes installing only 14 cartridges which could treat less than 2 % of the 6000 gpm 20-year 1-hour storm design flow by October 15, 2007, and would delay the installation of the 388 additional cartridges needed to treat runoff from the 20-year 1-hour design storm.

If the new, taller cartridges become available before Heavenly has funds to order the currently-available cartridges, Heavenly could order and install the taller cartridges. Heavenly could also treat up to 100% of the design flow by installing currently-available filter media cartridges. Heavenly could later install the taller cartridges when the older cartridges require replacement. Installation of additional cartridges of either type would allow Heavenly to treat more than 2% of the design flow and would reduce pollutant loads reaching Bijou Park Creek.

b. Completion of Wildwood Treatment System

Heavenly's request to extend the implementation date to complete constructing the Wildwood Treatment System is reportedly to allow more time to coordinate with the City of South Lake Tahoe (CSLT) to install treatment facilities designed to treat commingled Heavenly and CSLT runoff conveyed in storm drains and ditches. While coordination is generally desirable, Heavenly has not provided information demonstrating a project coordinated with the CSLT will be completed by October 15, 2009.

The Wildwood Treatment System proposed by Heavenly could be constructed in 2008. The Wildwood Treatment System, as designed, is likely to be compatible with future CSLT projects. If Heavenly provides additional information to the Water Board by March 30, 2008, demonstrating that a project (in coordination with CSLT) which will treat commingled runoff to a better degree than the currently designed project would be constructed by October 15, 2009, the Water Board will extend the compliance dates for the Wildwood Treatment System to October 15, 2009.

c. Meeting Effluent Limits for Discharge to Surface Waters

Heavenly's request to extend the date for compliance with effluent limits for discharge to surface waters cited uncertainty with initial treatment system performance and pending changes to the *Water Quality Plan for the Lahontan Basin* (Basin Plan) implementing the Lake Tahoe Total Maximum Daily Load (LT TMDL). The updated WDRs adopted in 2003 originally provided two years between retrofit implementation and compliance with effluent limits to allow for consideration of treatment systems that relied on establishment of vegetation.

Heavenly has selected a stormwater treatment system using large vaults with filter media cartridges. Unlike vegetated treatment systems where it may take two or more years for full vegetation establishment needed to filter and uptake pollutants, the stormwater treatment vault system selected by Heavenly should function at full capacity and efficiency after installation. Rather than extending compliance dates due to the Discharger's concerns with initial treatment system performance, or future Basin Plan changes related to LT TMDL implementation, it is appropriate to retain the requirement established in the 2003 updated WDRs to comply with effluent limitations by 2008.

6. Board Order Amendment

This amendment extends the due date to complete construction of the California Base Area Retrofit Plan by one year to **October 15, 2008**. It also requires Heavenly to implement an updated California Base Area Operation and Maintenance Plan designed to reduce the discharge of stormwater pollutants associated with delaying completion of the two treatment systems.

On August 16, 2007, Water Board staff requested Heavenly modify the existing California Base Area Interim Operation and Maintenance Plan to reduce discharge of pollutants to Bijou Park Creek. Heavenly is expected to provide an updated California Base Area Operations and Maintenance plan in September 2007. The plan will include a map identifying high priority snow storage areas where snowmelt runoff discharges to installed treatment Best

Management Practices (BMPs), and lower priority snow storage areas, where treatment BMPs had not been installed, and identify specific conditions when the lower priority areas could be used.

Storm water controls identified in the updated interim plan will include a variety of techniques to provide different levels and types of controls in different areas. Heavenly will identify interim and permanent measures which would be used during the remainder of 2007 and 2008, including, but not limited to:

- Obtaining additional funding to acquire and install filter media cartridges during the remainder of 2007 or prior to the seasonal closure of the ski area in 2008;
- Installing filter media cartridges in as many of the vaults in the parking lot as possible within 45 days of acquiring funding;
- Snow plowing, snow haul and snow pile management to maximize snowmelt into areas and conveyances where treatment BMPs have been installed, (e.g., reduced snow storage on Saddle Road or access road slopes which do not drain to installed treatment BMPs, spreading stored snow to hasten melting during sunny days on parking lot areas where installed BMPs can be effective in removing pollutant loads);
- Additional sweeping of parking areas and roads after the Dischargers apply abrasives or deicers; and
- Frequent inspection, removal and proper disposal of sediment or other pollutants from vaults or clarifiers.

Extending the construction completion date will result in discharge of pollutants that would have been retained if the treatment BMPs were completed in 2007. Therefore, interim operations and maintenance measures designed to reduce discharge of pollutants in stormwater are needed and are required.

This amendment extends the schedule for fully implementing the Retrofit Plan required for discharge specifications in Section II.D.4, but does not extend the November 30, 2008 compliance date in Section I.A.1 for the California Base Area discharges to surface waters in Bijou Park Creek.

#### 6. California Environmental Quality Act Compliance

The amendment is an action taken by a regulatory agency for the protection of the environment and is therefore exempt from the provisions of the California Environmental Quality Act in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15308.

7. Notification of Interested Parties

The Water Board has notified the Dischargers and interested parties of its intent to amend Waste Discharge Requirements for discharges associated with the Facility.

**IT IS HEREBY ORDERED** that:

- A. Provision II. D. 4. of Board Order No. R6T-2003-0032A1 is amended to read as follows:

The Dischargers must implement the California Base Area Retrofit Plan to comply with effluent limitations, receiving water standards and other waste discharge requirements. The Dischargers must complete construction no later than **October 15, 2008**. Pursuant to California Water Code § 13267, a technical report certifying the status of this work must be submitted by **November 30, 2008**.

The Dischargers will continue to maintain all constructed facilities and continue to implement the management controls identified in the California Base Area Retrofit Plan after the compliance date established in this section.

- B. Provision II. D. 7. of Board Order No. R6T-2003-0032A1 is added to read as follows:

7. California Base Area Operations and Maintenance Plan (CB O&M Plan)

- a. The Dischargers must implement the updated CB O&M Plan provided on September xx, 2007 by **November 15, 2007**.
- b. Upon request from the Executive Officer, or if the Dischargers modify facilities or change operations in a way that may affect the discharge of pollutants to surface waters, ground waters or a municipal storm sewer system, the Dischargers must update the CB O&M Plan. The CB O&M Plan shall be updated to develop, implement, and monitor operations and maintenance practices designed to improve the water quality of stormwater runoff discharged into Bijou Park Creek and the Bijou Park watershed. The updated plan must identify measures to reduce the potential pollutant load reaching stormwater conveyance and treatment systems, to maximize the routing of stormwater into the constructed treatment BMPs most capable of removing pollutants, and to minimize operations and maintenance activities that route stormwater (including snow plowed or blown from the parking lot and access roads) into stormwater conveyance systems where treatment BMPs have not yet been completed, or where completed BMPs are less effective in removing pollutants. The updated plan must include a map showing the location of conveyances for stormwater and non-stormwater, snow storage areas, treatment BMPs, outfalls to surface waters and municipal stormwater conveyance systems, and monitoring locations.



I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on October \_\_, 2007.

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HAROLD J. SINGER  
EXECUTIVE OFFICER

Tentative